

Minutes of the Derby Medical Society, Thursday 7th November 2024
Derby Medical School Lecture Theatre

Understanding and Managing Fear and Anxiety

Professor Steve Peters; Consultant Psychiatrist; Undergraduate Dean at Sheffield University and visiting Professor at Derby University

Apologies: None Received

Dr Sally Archer, President, welcomed everyone to the third meeting of the 2024-2025 season.

Minutes of previous meeting given by Dr McIntyre

Dr Archer introduced Professor Steve Peters. She recalled their time together as medical students at St Mary's and shared anecdotes of some of their experiences. Prof Peters explained how he became interested in running while part of the Athletics club at St Marys and went on to compete and hold Masters world records over the 100, 200 and 400 metres.

Prof Peters is a Consultant Psychiatrist who specialises in the functioning of the human mind. He has worked in clinical psychiatry, including Forensic psychiatry, and education. He is a Senior Clinical Lecturer of Medicine at Sheffield University, Undergraduate Dean at Sheffield University and visiting Professor at Derby University. He holds degrees, higher degrees and postgraduate qualifications in medicine, mathematics, education, medical education, sports medicine and psychiatry. He has worked with a wide range of people from different disciplines including health, education, business and elite sport. He is an acclaimed author and has written 4 books including the bestselling self-help book, *The Chimp Paradox*, which has sold over a million copies.

Prof Peters opened his lecture explaining it would be a 'gallop' through the human mind touching on areas such as uniqueness, malfunction and dysfunction. A guiding principle in the 'chimpanzee paradox model' for mind management will be to consider the mind as a machine with rules. He gave an overview of the underlying neuroscience relevant to the model. There are key areas of the brain involved such as the orbito-frontal cortex, the amygdala, the cingulate cortex, the ventro-medial prefrontal cortex, hypothalamus and basal ganglia and their connecting pathways. There are three important parts of the model: the two decision makers (the 'chimpanzee' and the 'human') and a third component ('computer') and these are located to brain areas and pathways. Humans are closer to the bonobo genetically, but in terms of brain structure more similar to the chimpanzee.

In the model the 'chimpanzee' represents the primitive system within the limbic area. It is what nature gives to us and is essential for survival. It necessarily has to respond quickly and the commonly results in the familiar fight, flight or freeze response. It is not based on logic or reasoning but is an emotional response that can keep us safe when danger threatens. We are not in charge of the chimpanzee but should recognise that it is not intrinsically bad. However in our modern world we can find the immediate responses occurring when it is triggered can be unhelpful and often bring about negative emotions. We are not able to change the chimpanzee but it is possible to manage it. Prof Peters emphasised that this is not an excuse model and as humans we are fully responsible for managing the chimpanzee.

The second decision maker, the 'human' arises in the frontal areas. In our development we recognise changes occurring at around the age of 3 years where children often go through a stage of persistently asking 'why' as they make sense of the world. Prof Peters gave examples of how dealing responsively with these questions is important in laying down brain systems. The decision making arises not out of emotions but from logic, rationality and facts. The human is responsible for conscious thinking and is 'you'. It enables us to respond rather than simply reacting. However the chimp has a much faster response to inputted information.

The 'computer' is located in the parietal region. Both the chimp and the human can lay down information that can be stored in the computer. The computer can act as a store for information but also by using programmed thoughts and behaviours can act quickly and enable us to go into an autopilot mode. Both the human and the chimp access the computer and it therefore can play an important role in helping us navigate daily life and furthermore can be a way of managing the chimp. The computer holds the beliefs that we as individuals decide are important.

These concepts give a working model of the mind. They can be used to help understand why react in certain circumstances and provide a way to approach addressing the fears and anxieties so commonplace in modern society. Prof Peters gave examples of how it has been applied to clients from a wide variety of backgrounds and professions been found consistently to resonate with them and enables them to change behaviours.

Throughout his presentation Prof Peters used video clips that were thought provoking and illustrative of how our minds work.

He concluded his talk by noting how in our professional life we often are in situations where we are likely to encounter the chimp and he pointed out that when we only see the chimp we never know the person. Recognising the chimp in action means we can approach in a way that might facilitate allowing the human to be seen.

There followed a lively question and answer session.

56 members and guests signed the register.